**Amendments to the Claims:** 

This listing of claims will replace all prior versions, and listings, of claims in the

application:

**Listing of Claims:** 

Claim 1 (currently amended): A composition comprising at least one carotenoid-

containing material, enriched in cis-isomer of the carotenoid compound such that the cis:trans

isomer ratio of the carotenoid compound is at least 20:80, wherein the carotenoid compound is

selected from the group consisting of lycopene, xeaxanthine, beta-cryptoxanthin, capsanthine,

canthaxanthine, lutein, phytofluene, phytoene, and combinations thereof.

Claim 2 (previously presented): The composition according to claim 1, wherein the

carotenoid-containing material is obtained, extracted or purified from a material selected from

the group consisting of a plant material, vegetable material, microorganism, yeast and product of

animal origin.

Claim 3 (previously presented): The composition according to claim 1, wherein the

carotenoid-containing material is in a form selected from the group consisting of an extract, a

concentrate and an oleoresin.

Claim 4 (previously presented): The composition according to claim 1, wherein the

cis-isomers of the carotenoid compound are present in an amount effective to increase the

bioavailability and/or bioefficacy of the carotenoid compound.

Claim 5 (canceled)

Claim 6 (canceled).

Claim 7 (canceled).

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Claim 8 (previously presented): The composition according to claim 1, wherein the composition is in a form selected from the group consisting of a liquid, gel and powder form.

Claim 9 (currently amended): An oral composition comprising a primary composition comprising at least one carotenoid-containing material, enriched in *cis*-isomer of the carotenoid compound the *cis:trans* isomer ratio of the carotenoid compound is at least 20:80, wherein the carotenoid compound is selected from the group consisting of lycopene, xeaxanthine, beta-cryptoxanthin, capsanthine, canthaxanthine, lutein, phytofluene, phytoene, and combinations thereof, in a form selected from the group consisting of a foodstuff, a food supplement, a pet food product, a cosmetic preparation or a pharmaceutical preparation.

## Claim 10 (canceled)

Claim 11 (previously presented): The oral composition according to claim 9, wherein the food supplement is provided in a form selected from the group consisting of capsules, gelatin capsules, soft capsules, tablets, sugar-coated tablets, pills, pastes or pastilles, gums, drinkable solutions or emulsions, syrups and gels.

Claim 12 (previously presented): The oral composition according to claim 11, comprising at least one component selected from the group consisting of a sweetener, a stabilizer, a flavoring and a colorant.

Claim 13 (original): The oral composition according to claim 9, wherein the cosmetic preparation additionally comprises a compound active with respect to the skin.

Claim 14 (previously presented): The oral composition according to claim 9, wherein the primary composition comprises between about 0.001 and 100% of the oral composition.

Claim 15 (currently amended): A cosmetic composition comprising a primary composition comprising at least one carotenoid-containing material, enriched in *cis*-isomer of the carotenoid compound such that the *cis:trans* isomer ratio of the carotenoid compound is at least 20:80, wherein the carotenoid compound is selected from the group consisting of lycopene, xeaxanthine, beta-cryptoxanthin, capsanthine, canthaxanthine, lutein, phytofluene, phytoene, and combinations thereof.

Claim 16 (previously presented): The cosmetic composition according to claim 15, wherein the primary composition comprises between about 10<sup>-10</sup> and 10% of the cosmetic composition.

Claim 17 (withdrawn): A process for the preparation of a composition which comprises subjecting at least one carotenoid-containing material, enriched in *cis*-isomers of the carotenoid compound to a treatment under conditions sufficient to increase the content of the *cis*-isomers in the carotenoid containing material.

Claim 18 (withdrawn): The process according to claim 17, wherein the *cis*-isomer content is in an amount effective to increase the bioavailability and bioefficacy of said carotenoid compound.

Claim 19 (withdrawn): The process according to claim 18, wherein the treatment is selected from the group consisting of a thermal, acidic treatment, an electromagnetic irradiation and a radical reaction.

Claim 20 (withdrawn): The process according to claim 19, wherein the primary composition is further subjected to a treatment to modify its isomer profile.

Claim 21 (withdrawn): The process according to claim 20, in which the treatment is a solubilisation of *cis*-isomers in selected organic solvents followed by a phase separation using centrifugation or filtration.

Claim 22 (currently amended): A method for improving skin health comprising the step of administering to a patient in need of improved skin health at least one carotenoid-containing material, enriched in *cis*-isomer of the carotenoid compound such that the *cis:trans* isomer ratio of the carotenoid compound is at least 20:80, wherein the carotenoid compound is selected from the group consisting of lycopene, xeaxanthine, beta-cryptoxanthin, capsanthine, canthaxanthine, lutein, phytofluene, phytoene, and combinations thereof.

Claim 23 (previously presented): The method according to claim 22, wherein the method for improving skin health includes at least one treatment selected from the group consisting of protecting the tissues of the skin against ageing, the treatment of sensible, dry or reactive skins, for improving skin density or firmness, and for increasing skin photoprotection.

Claim 24 (currently amended): A method for treating cardiovascular diseases or cancers comprising the step of administering to a patient having cardiovascular disease at least one carotenoid-containing material, enriched in *cis*-isomer of the carotenoid compound <u>such that the *cis:trans* isomer ratio of the carotenoid compound is at least 20:80</u>, wherein the carotenoid compound is selected from the group consisting of lycopene, xeaxanthine, beta-cryptoxanthin, capsanthine, canthaxanthine, lutein, phytofluene, phytoene, and combinations thereof.

Claim 25 (previously presented): The oral composition according to claim 9, wherein the primary composition comprises between about 10 and 50% of the oral composition.

Claim 26 (currently amended): A method for treating cancer comprising the step of administering to a patient having cancer at least one carotenoid-containing material, enriched in *cis*-isomer of the carotenoid compound such that the *cis:trans* isomer ratio of the carotenoid compound is at least 20:80, wherein the carotenoid compound is selected from the group consisting of lycopene, xeaxanthine, beta-cryptoxanthin, capsanthine, canthaxanthine, lutein, phytofluene, phytoene, and combinations thereof.